

# Small Clause-based Sluicing: New type of Japanese sluicing

Masashi Harada, Linguistics Department, University of Kansas (m973h272@ku.edu)



## Gloss

Nom = nominative Case, Acc = accusative Case, Gen = genitive Case, Dat. = dative Case, Top = topic, Pst = past Tense, NPst = non-past Tense, Neg = negation, Q = question particle, C = complementizer, Pss = passive, Stv. = stative, Cont. = contrastive

## Background

### English sluicing (Genuine sluicing)

• English sluicing: TP deletion subsequent to overt wh-movement (Ross 1969).

- (1) a. **Antecedent sentence**  
Taro bought something.
- b. **Sluiced sentence**  
I don't know [<sub>CP</sub> what]. (underlined CP = sluice)
- c. **Underlying structure of the sluice in (1b)**  
[<sub>CP</sub> what<sub>i</sub> [<sub>TP</sub> Taro bought<sub>t</sub> <sub>t</sub> ]]

### Japanese sluicing (Pseudosluicing (Merchant 1998))

• Japanese sluicing: deletion of the CP subject (and *de ar-*) in a copular sentence (e.g. Kizu 1997). (*de ar-* is the uncontracted form of the copula *da* (Nishiyama 1999))

- (2) a. **Antecedent sentence**  
Taroo-ga nanika-o kat-ta.  
T-Nom something-Acc buy-Pst  
'Taro bought something.'
- b. **Sluiced sentence**  
Boku-wa [<sub>CP</sub> nani-o (de ar-u) ka] sira-na-i. (underlined CP = sluice)  
I-Top what-Acc de ar-NPst Q know-Neg-NPst  
'I don't know what'
- c. **Underlying structure of the sluice in (2b) (Pseudosluicing analysis)**  
[<sub>CP</sub> [<sub>CP</sub> Taroo-ga kat-ta no]-ga nani-o (de ar-u) ka]  
T-Nom buy-Pst C-Nom what-Acc de ar-NPst Q  
'what it is that Taro bought'
- d. **Underlying structure of the sluice in (2b) (Genuine sluicing analysis)**  
[<sub>CP</sub> nani-o<sub>i</sub> [<sub>TP</sub> Taroo-ga <sub>t</sub> kat-ta] (\*de ar-u) ka]  
what-Acc T-Nom buy-Pst de ar-u Q  
'what Taro bought'

- ★1 (2b): ✓ de ar-u ] → (2b) derives from (2c) by ① deleting the subject CP and (2c): ✓ de ar-u ] → (2b) derives from (2c) by ① deleting the subject CP and (2d): \* de ar-u ] → (2b) derives from (2c) by ① deleting the subject CP and ② optionally deleting *de ar-*.

### Evidence for the availability of the deletion of ① and ②

① Japanese argument can undergo deletion (e.g. Oku1998)

(3)(based on Saito's (2004) (44), 34)

#### a. Antecedent sentence

Mari-wa [zibun-no teean-ga saiyou-sare-ru to] omot-tei-ru  
M-Top self-Gen proposal-Nom accept-Pss-Npst C think-Stv.-NPst  
'Mari thinks that her proposal will be accepted.'

#### b. Sentence with an embedded subject missing

Ziroo-mo [ [e] saiyou-sare-ru to] omot-tei-ru  
Z-also accept-Pss-Npst C think-Stv.-NPst  
**strict reading:** 'Ziroo also thinks that her proposal will be accepted.'  
**sloppy reading:** 'Ziroo also thinks that his proposal will be accepted.'

#### c. Underlying Sentence of (3b) such that its [e] = deleted phrase

Ziroo-mo [zibun-no teean-ga saiyou-sare-ru to] omot-tei-ru  
M-also self-Gen proposal-Nom accept-Pss-Npst C think-Stv.-NPst  
**sloppy reading:** 'Ziroo also thinks that his proposal will be accepted.'

#### d. (3b)'s counterpart where *pro* in [e] in (3b) is overtly spelled out

Ziroo-mo [ sore-ga saiyou-sare-ru to] omot-tei-ru  
Z-also it-Nom accept-Pss-Npst C think-Stv.-NPst  
**strict reading:** 'Ziroo also thinks that her proposal will be accepted.'

- ★2 (3b): ✓ sloppy reading ] → embedded subject in (3c) can delete, and (3c): ✓ sloppy reading ] → embedded subject in (3c) can delete, and (3d): \* sloppy reading ] → embedded subject in (3c) can delete, and result in (3b).

② *de ar-* can delete in the embedded clause as shown in (2c).

## Puzzle

• A hallmark of the pseudosluicing, *de ar-*, cannot appear in every Japanese sluicing construction.

#### (4) a. Antecedent sentence

Taroo-wa asita nanika-o ka-u.  
T-Top tomorrow something-Acc buy-NPst  
'Taro will buy something tomorrow.'

#### b. Sluiced sentence

Sikasi, [<sub>CP</sub> nani-o (??de ar-u) ka]-wa kime-tei-na-i  
but what-Acc de ar-NPst Q-Cont. decide-Stv.-Neg-NPst  
'But he hasn't decided what.'

## Proposal

### *ni sur-* instead of *de ar-*

• Where *de ar-u* appears in (4b), *ni sur-u*, an expression used in small clause constructions (SC), can appear instead, as in (4c).

#### (5) Japanese small clause construction

Taroo-ga [<sub>SC</sub> musuko-o isya ni] si-ta  
T-Nom son-Acc doctor ni si-Pst  
'Taro made his son a doctor.'

※ *sur-*: I assume *ni* functions as connecting the SC subject and its predicate in the sense of den Dikken's (2006) RELATOR, and that *sur-* has a causative feature, which triggers the event denoted by the predication of *his son being a doctor*.

#### (4) c. Sluiced sentence

Sikasi, [<sub>CP</sub> [nani-o (ni sur-u) ka]-wa kime-tei-na-i  
but what-Acc ni sur-NPst Q-Cont. decide-Stv.-Neg-NPst  
'But he hasn't decided what'

#### d. Underlying structure of the sluice in (4c) (SC)

[<sub>CP</sub> [<sub>CP</sub> asita ka-u no]-o nani-o (ni sur-u) ka]  
tomorrow buy-NPst C-Acc what-Acc ni sur-NPst Q  
'(intended) for X such that he decides it is X that he buys tomorrow, X is what.'

- ★3 (4c): ✓ ni sur-u ] → (4c) derives from (4d) by ① deleting the SC subject CP (4d): ✓ ni sur-u ] → (4c) derives from (4d) by ① deleting the SC subject CP and ② optionally deleting *ni sur-*.

### Evidence for the availability of the deletion of ① and ②

① Accusative Case-marked argument can also delete in Japanese.

#### (6) a. Antecedent sentence

Taroo-wa Ziroo-ni zibun-no e-o age-ta  
T-Top Z-Dat self-Gen picture-Acc give-Pst  
'Taro gave Ziro his picture.'

#### b. Sentence with an argument missing

Mari-mo Yuuko-ni [e] age-ta  
M-also Y-Dat give-Pst  
**strict reading:** 'Mari also gave Yuko his picture.'  
**sloppy reading:** 'Mari also gave Yuko her picture.'

#### c. Underlying Sentence of (6b) such that its [e] = deleted phrase

Mari-mo Yuuko-ni zibun-no e-o age-ta  
M-also Y-Dat self-Gen picture-Acc give-Pst  
**sloppy reading:** 'Mari also gave Yuko her picture.'

#### d. (6b)'s counterpart where *pro* in [e] in (6b) is overtly spelled out

Mari-mo Yuuko-ni sore-o age-ta  
M-also Y-Dat it-Acc give-Pst  
**strict reading:** 'Mari also gave Yuko his picture.'

- ★4 (6b): ✓ sloppy reading ] → Accusative Case-marked argument in (6c) can delete, and result in (6b). (6c): ✓ sloppy reading ] → Accusative Case-marked argument in (6c) can delete, and result in (6b). (6d): \* sloppy reading ] → Accusative Case-marked argument in (6c) can delete, and result in (6b).

② *ni sur-* can delete in the embedded clause as shown in (4d).

Japanese sluicing can derive from a small clause as well.  
⇒ Small Clause-based sluicing

## Similarity between the Pseudosluicing & SC sluicing

• In light of the following two points (7), copular sentences with *de ar-* and the SC with *ni sur-* can be analyzed in parallel (8), and so can two types of sluicing constructions derived from those sentences (9).

- (7) a. *de* of *de ar-* can also be considered a RELATOR, heading the RP (RELATOR phrase)  
b. *ar-* of *de ar-* takes the RP as its complement, just like *sur-* of *ni sur-*.

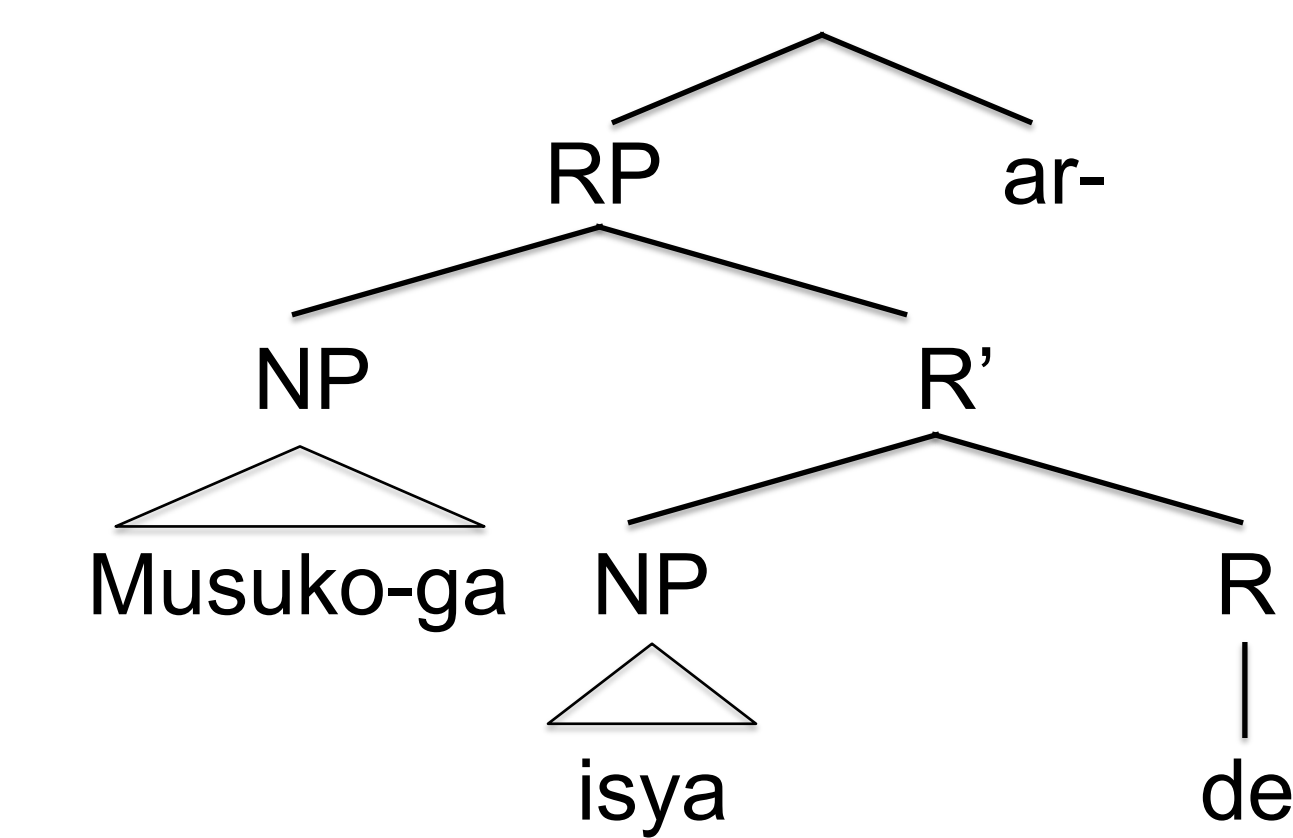
#### (8) a. Sentence with *de ar-*

[Musuko-ga isya de] ar-u  
son-Nom doctor de ar-NPst  
'My son is doctor.'

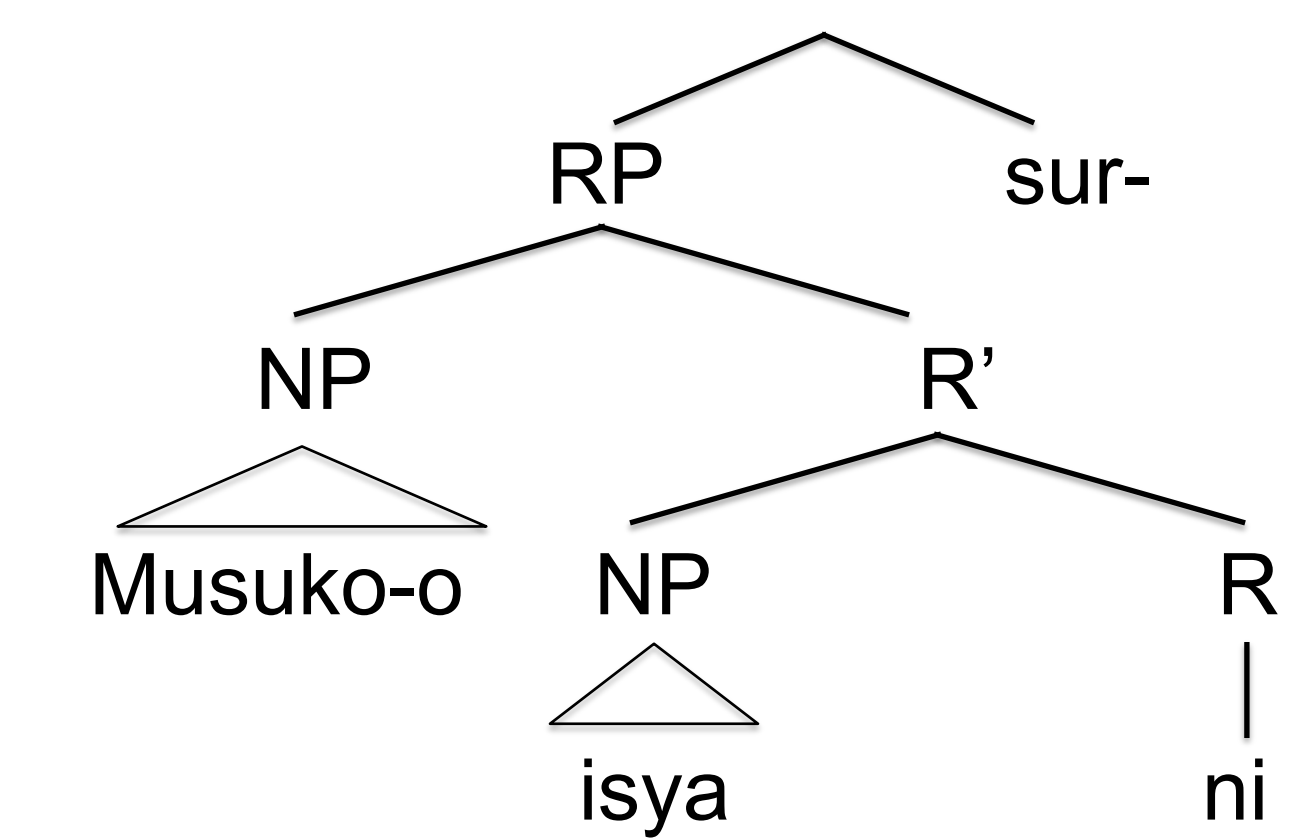
#### b. Sentence with *ni sur-* (so-called SC)

Taroo-ga [musuko-o isya ni] sur-u  
T-Nom son-Acc doctor ni sur-NPst  
'Taro makes his son a doctor.'

#### a'. Partial tree diagram of (8a)



#### b'. Partial tree diagram of (8b)



#### (9) Sluiced sentence

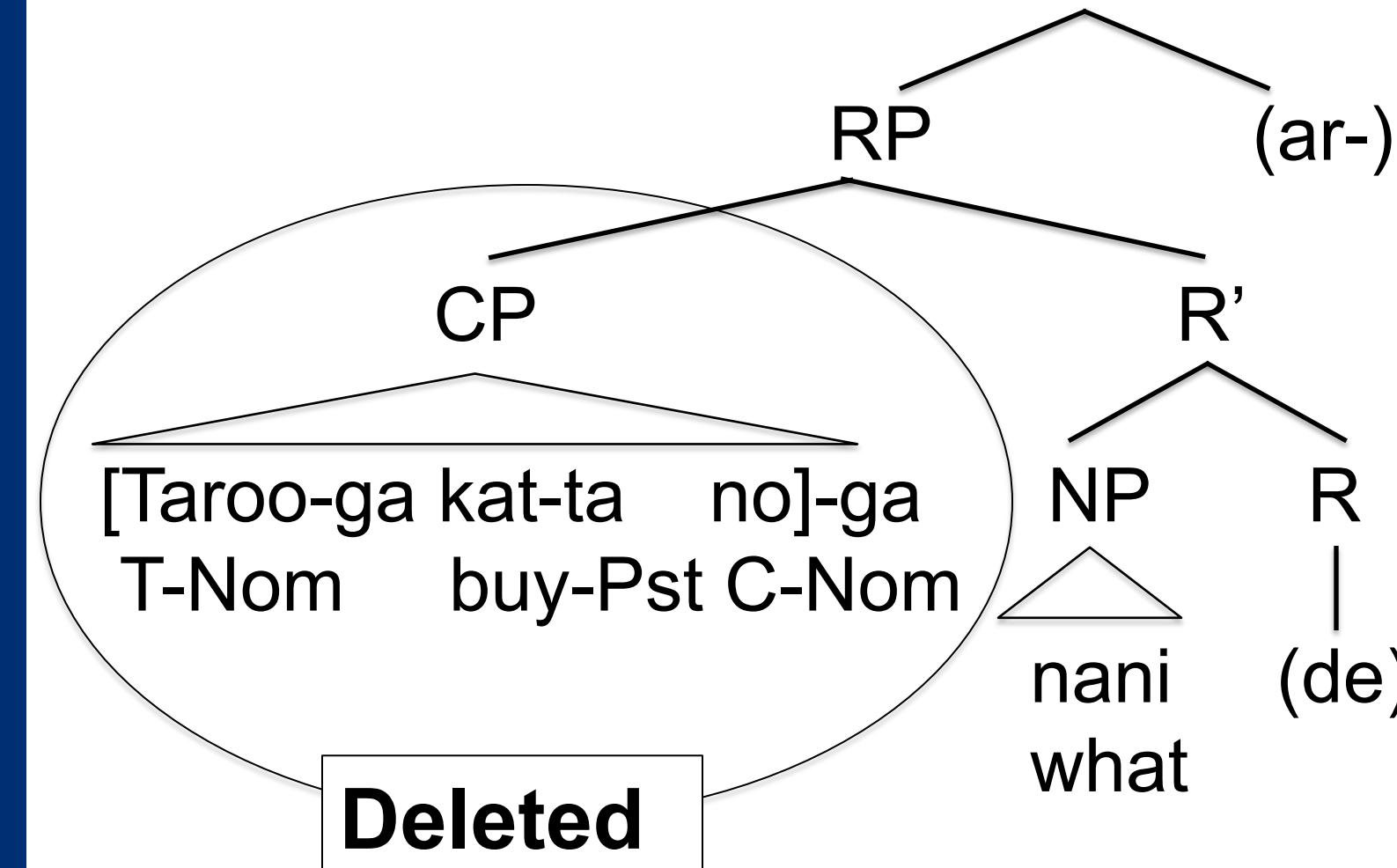
##### a. Sluice in the Pseudosluicing (= (2b))

[<sub>CP</sub> nani-o (de ar-u) ka]  
what-Acc de ar-NPst Q

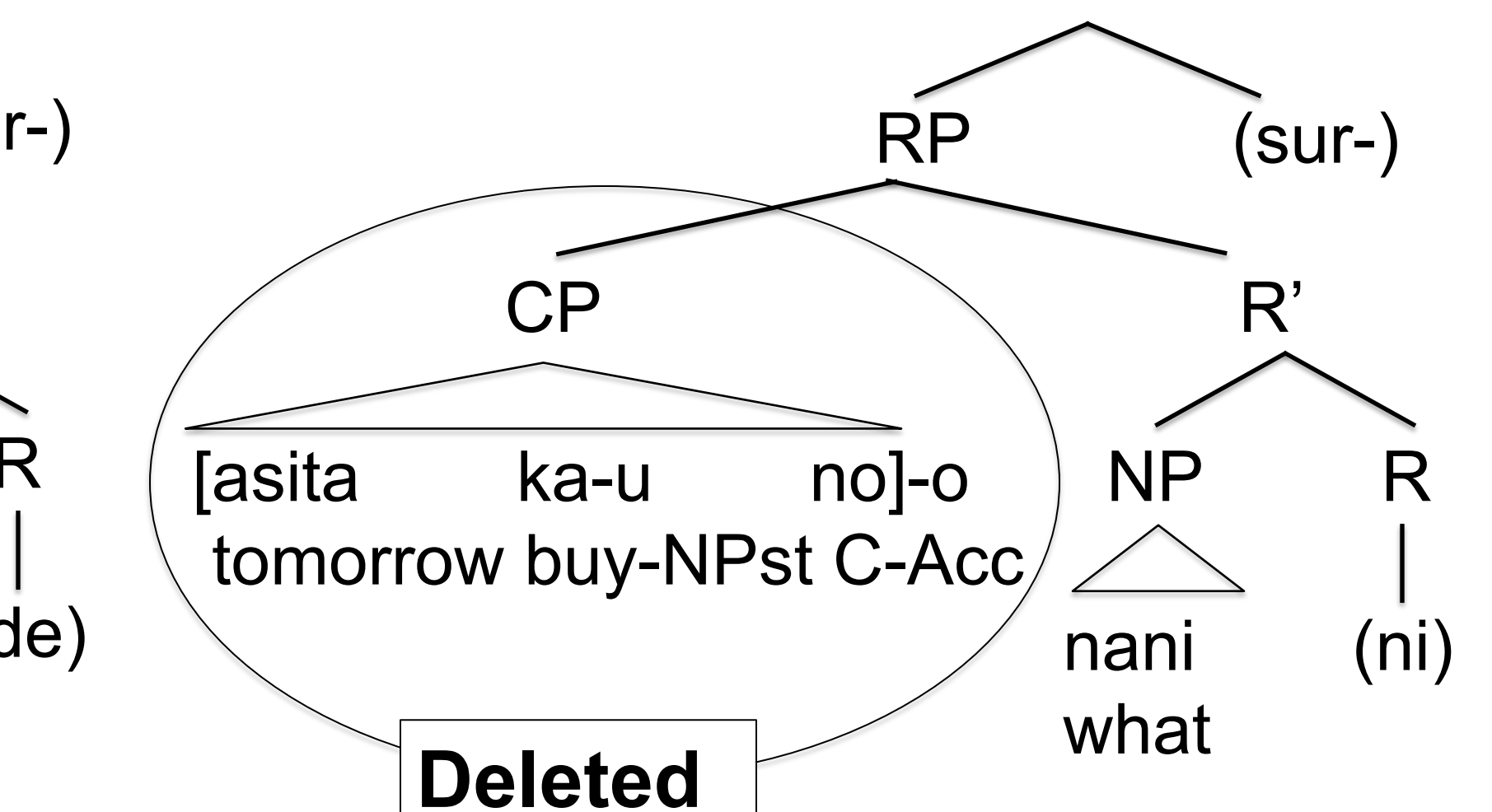
##### b. Sluice in the SC sluicing (=4c)

[<sub>CP</sub> nani-o (ni sur-u) ka]  
what-Acc ni sur-NPst Q

#### a'. Partial tree diagram of (9a)



#### b'. Partial tree diagram of (9b)



Japanese sluicing: deletion of the Spec RP, and optional deletion of the RP head and the element (presumably a verb or auxiliary verb) that take the RP as its complement.

## Conclusion

• Japanese sluicing derives not only from a conventional copular sentence (i.e. pseudosluicing) but also from a small clause (i.e. small Clause-based sluicing).

• Despite the distinct looks of the Pseudosluicing and small clause-based sluicing on the surface, they are identical in nature, if we consider the deleted expressions factoring into the predicational structures of those sluicing constructions.

## Acknowledgment

Many thanks to Kenichi Namai, Isaac Gould, Harold Torrence, Jason Kandybowicz, Philip Duncan, and Travis Major for their assistance and feedback.